Part 1 – Claim Listing

1. (Previously presented) An indwelling catheter to drain urine from a bladder to a location adjacent to a urinary sphincter muscle in a urinary tract which also includes a urinary canal extending from the sphincter muscle to an exterior opening, comprising:

a main body having a distal end, a proximal end and a length sufficient to position the distal end within the bladder and to position the proximal end adjacent to and distal of the sphincter muscle within the urinary tract, the main body defining an urine drainage interior passageway extending from the distal end to the proximal end;

a balloon attached to the distal end of the main body, the balloon expandable in size within the bladder to maintain the distal end in the bladder and restrain the main body against proximal movement within the urinary tract from a use position, the use position locating the distal end of the main body in the bladder and the proximal end of the main body adjacent to and distal of the sphincter muscle;

an inflation tube having a distal end, a proximal end and a length extending between the distal and proximal ends, the distal end connected to the main body, the length sufficient to extend from the main body through the urinary canal to the exterior opening when the main body is in the use position, the inflation tube and the main body defining an inflation passageway extending from the proximal end of the inflation tube to the balloon through which to deliver inflation fluid for expanding the balloon; and

a coiled section of the inflation tube formed at a position along the inflation tube to locate the coiled section within the urinary canal adjacent to and proximal of the sphincter muscle when the main body is located in the use position, the coiled section interacting with a constriction of the urinary tract by the sphincter muscle to restrain the main body against distal movement within the urinary tract from the use position.

2. (Original) An indwelling catheter as defined in claim 1, wherein:

the coiled section is resilient in a transverse dimension.

3. (Original) An indwelling catheter as defined in claim 1, wherein:

the coiled section is resilient in a longitudinal dimension.

4. (Original) An indwelling catheter as defined in claim 1, wherein:

the coiled section is resilient in a transverse dimension and in a longitudinal dimension.

5. (Original) An indwelling catheter as defined in claim 1, wherein:

the coiled section comprises a plurality of individual adjacent coils each formed by the inflation tube.

6. (Original) An indwelling catheter as defined in claim 5, wherein:

each coil of the coiled section is resilient in a transverse dimension and the coils of the coiled section are collectively resilient in a longitudinal dimension.

7. (Original) An indwelling catheter as defined in claim 6, wherein:

the resilient individual coils decrease in the transverse dimension upon elongation of the coiled section in the longitudinal dimension.

8. (Original) An indwelling catheter as defined in claim 1, wherein:

the coiled section has an outer transverse dimension, the main body has an outer transverse dimension, and the outer transverse dimension of the coiled section is greater than the outer transverse dimension of the main body.

9. (Original) An indwelling catheter as defined in claim 8, wherein:

the coiled section has a center opening having an inner transverse dimension, and the inner transverse dimension of the coiled section is substantially the same as the exterior transverse dimension of the main body.

10. (Original) An indwelling catheter as defined in claim 9, in combination with:

an insertion tool for connection to the indwelling catheter to move the indwelling catheter within the urinary tract to the use position, the insertion tool having first and second opposite ends and a length sufficient to position the first end within the urinary tract distal of the sphincter muscle while the second end is at the exterior of the urinary canal; and wherein:

the insertion tool extends through the center opening of the coiled , section.

11. (Original) An indwelling catheter as defined in claim 10, wherein:

the insertion tool has an exterior transverse dimension, and the exterior transverse dimension of the insertion tool is substantially the same as the exterior transverse dimension of the main body.

12. (Original) An indwelling catheter as defined in claim 10, further comprising:

a separable connection between the main body and the insertion tool to permit disconnection of the indwelling catheter and the insertion tool upon locating the indwelling catheter in the use position.

13. (Original) An indwelling catheter as defined in claim 12, wherein:

the separable connection retains the main body to the insertion tool to permit movement of the insertion tool and the indwelling catheter as a unit when positioning the indwelling catheter in the use position; and

the separable connection permits separation of the indwelling catheter and the insertion tool in response to continued proximal movement of the insertion tool when the expanded balloon restrains the main body against proximal movement from the use position.

14. (Original) An indwelling catheter as defined in claim 12, wherein:

the separable connection includes a selectively disconnectable bridging structure extending between the main body and the insertion tool, the bridging structure fastening the main body to the insertion tool when connected, the bridging structure releasing the main body from the insertion tool when the bridging structure is disconnected to permit separation of the indwelling catheter from the insertion tool in response to continued proximal movement of the insertion tool when the expanded balloon restrains the main body against proximal movement from the use position.

15. (Previously presented) An indwelling catheter as defined in claim 14, wherein:

the selectively disconnectable bridging structure comprises a cord which extends between the main body and the insertion tool when the bridging structure connects the main body to the bridging structure; and

the extension of the cord between the main body and the insertion tool is eliminated when the bridging structure is disconnected.

16. (Original) An indwelling catheter as defined in claim 15, wherein:

the insertion tool defines an interior channel extending between the first and second opposite ends of the insertion tool; and

the interior channel of the insertion tool is in fluid communication with the interior passageway of the main body when the insertion tool is connected to the indwelling catheter at the separable connection.

17. (Original) An indwelling catheter as defined in claim 16, wherein:

the cord also extends from the separable connection through the interior channel of the insertion tool when the bridging structure connects the main body to the insertion tool.

18. (Original) An indwelling catheter as defined in claim 16, wherein:

the cord also extends from the separable connection through the interior channel to the second end of the insertion tool when the bridging structure connects the main body to the insertion tool.

19. (Original) An indwelling catheter as defined in claim 10, wherein:

the insertion tool defines an interior channel extending between the first and second opposite ends of the insertion tool; and

the interior channel of the insertion tool is in fluid communication with the interior passageway of the main body when the insertion tool is connected to the indwelling catheter at the separable connection.

20. (Original) An indwelling catheter as defined in claim 1, in combination with:

an insertion tool for connection to the main body to move the indwelling catheter within the urinary tract to the use position, the insertion tool having first and second opposite ends and a length sufficient to position the first end within the urinary

tract distal of the sphincter muscle while the second end is at the exterior of the urinary canal; and wherein:

the coiled section winds around the insertion tool when the insertion tool is connected to the indwelling catheter.

21. (Original) An indwelling catheter as defined in claim 20, further comprising:

a separable connection between the main body and the insertion tool.

22. (Original) An indwelling catheter as defined in claim 21, wherein:

the separable connection connects the main body to the insertion tool for movement of the insertion tool and the indwelling catheter as a unit when positioning the indwelling catheter in the use position; and

the separable connection permits separation of the main body from the insertion tool in response to continued proximal movement of the insertion tool when the expanded balloon restrains the main body against proximal movement from the use position.

23. (Original) An indwelling catheter as defined in claim 22, wherein:

the insertion tool is removable from within the coiled section in response to a predetermined amount of proximal movement of the insertion tool in the urinary canal relative to the main body after separation at the separable connection.

24. (Original) An indwelling catheter as defined in claim 23, wherein:

the coiled section permits substantially unimpeded proximal movement of the insertion tool within the coiled section after separation at the separable connection.

25. (Original) An indwelling catheter as defined in claim 22, wherein:

the separable connection includes a selectively disconnectable bridging structure extending between the main body and the insertion tool, the bridging structure fastening the main body to the insertion tool when connected, the bridging structure releasing the main body from the insertion tool when the bridging structure is disconnected to permit separation of the indwelling catheter from the insertion tool

in response to continued proximal movement of the insertion tool when the expanded balloon restrains the main body against proximal movement from the use position.

26. (Original) An indwelling catheter as defined in claim 25, wherein:

the selectively disconnectable bridging structure comprises a cord which extends between the main body and the insertion tool when the bridging structure connects the main body to the insertion tool; and

the extension of the cord between the main body and the insertion tool is eliminated when the bridging structure is disconnected.

27. (Original) An indwelling catheter as defined in claim 26, wherein:

the insertion tool defines an interior channel extending between the first and second opposite ends of the insertion tool; and

the interior channel of the insertion tool is in fluid communication with the interior passageway of the main body when the insertion tool is connected to the indwelling catheter at the separable connection.

28. (Original) An indwelling catheter as defined in claim 27, wherein:

the cord also extends from the separable connection through the interior channel of the insertion tool when the bridging structure connects the main body to the insertion tool.

29. (Original) An indwelling catheter as defined in claim 27, wherein:

the cord also extends from the separable connection through the interior channel to the second end of the insertion tool when the bridging structure connects the main body to the insertion tool.

30. (Original) An indwelling catheter as defined in claim 21, wherein:

the insertion tool defines an interior channel extending between the first and second opposite ends of the insertion tool; and

the interior channel of the insertion tool is in fluid communication with the interior passageway of the main body when the insertion tool is connected to the indwelling catheter at the separable connection.

31. (Previously presented) An indwelling catheter as defined in claim 20, wherein:

the coiled section maintains a portion of the inflation tube between the coiled section and the proximal end of the main body substantially in alignment with a portion of the insertion tool during movement of the indwelling catheter and the insertion tool as a unit within the urinary tract to the use position.

32. (Original) An indwelling catheter as defined in claim 20, for use with a syringe having a nozzle, further comprising:

a valve assembly connected to the proximal end of the inflation tube, the valve assembly including a receptacle by which to connect the nozzle of the syringe for transferring inflation fluid from the syringe into the inflation passageway for inflating the balloon.

33. (Original) An indwelling catheter as defined in claim 32, wherein:

the insertion tool has an exterior surface; and

the inflation tube extends along the exterior surface of the insertion tool when the main body is connected to the insertion tool.

34. (Currently amended) An assembly of an indwelling catheter and an insertion tool, the indwelling catheter used to drain urine from a bladder to a location adjacent to a urinary sphincter muscle in a urinary tract which also includes a urinary canal extending from the sphincter muscle to an exterior opening, the insertion tool used to move the indwelling catheter within the urinary tract when connected to the indwelling catheter, the assembly comprising:

a main body of the indwelling catheter, the catheter main body having a distal end, a proximal end and a length sufficient to position the distal end within the bladder and to position the proximal end adjacent to and distal of the sphincter muscle within the urinary tract, the catheter main body defining an urine drainage interior passageway extending from the distal end to the proximal end;

a balloon attached to the distal end of the catheter main body, the balloon expandable in size within the bladder;

an inflation tube having a distal end, a proximal end and a length extending between the distal and proximal ends, the distal end connected to the catheter main body, the length sufficient to extend from the catheter main body

through the urinary canal to the exterior opening when the indwelling catheter is located in the use position, the inflation tube and the catheter main body defining an inflation passageway extending from the proximal end of the inflation tube to the balloon through which to deliver inflation fluid for expanding the balloon;

a coiled section of the inflation tube formed at a position along the inflation tube to locate the coiled section within the urinary canal adjacent to and proximal of the sphincter muscle when the indwelling catheter is located in the use position, the coiled section interacting with a constriction of the urinary tract by the sphincter muscle to restrain the catheter main body against distal movement within the urinary tract from the use position;

a main body of the insertion tool, the tool main body first and second opposite ends and a length sufficient to position the first end within the urinary tract distal of the sphincter muscle while the second end is at the exterior of the urinary canal; and

a separable connection between the catheter main body and the tool main body, the separable connection maintaining the insertion tool connected to the indwelling catheter for movement as a unit when positioning the indwelling catheter in a use position, the use position locating the distal end of the catheter main body in the bladder and the proximal end of the catheter main body adjacent to and distal of the sphincter muscle, the separable connection permitting selective separation of the tool main body from the catheter main body in response to proximal movement of the insertion tool when the expanded balloon restrains the catheter main body against proximal movement from the use position; and wherein:

the coiled section of the inflation tube winds around the insertion tool when the insertion tool is connected to the indwelling catheter.

35. (Previously presented) An assembly as defined in claim 34, wherein:

the separable connection includes a selectively disconnectable bridging structure extending between the catheter main body and the tool main body, the bridging structure fastening together the catheter and tool main bodies when the bridging structure is connected, the bridging structure releasing the tool and the

catheter main bodies from one another when the bridging structure is disconnected to permit separation of the tool main body from the catheter main body in response to continued proximal movement of the insertion tool when the expanded balloon restrains the catheter main body against proximal movement from the use position.

36. (Original) An assembly as defined in claim 35, wherein:

the selectively disconnectable bridging structure comprises a cord which extends between the catheter and tool main bodies when the bridging structure connects the catheter and tool main bodies; and

the extension of the cord between the catheter and tool main bodies is eliminated when the bridging structure is disconnected.

37. (Original) An assembly as defined in claim 36, wherein:

the insertion tool defines an interior channel extending between the first and second opposite ends of the insertion tool; and

the interior channel of the insertion tool is in fluid communication with the interior passageway of the main body when the insertion tool is connected to the indwelling catheter at the separable connection.

38. (Original) An assembly as defined in claim 37, wherein:

the cord also extends from the separable connection through the interior channel of the insertion tool when the bridging structure connects the catheter and tool main bodies.

39. (Original) An assembly as defined in claim 37, wherein:

the cord also extends from the separable connection through the interior channel to the second end of the insertion tool when the bridging structure connects the catheter and tool main bodies.

40. (Original) An assembly as defined in claim 34, wherein:

the tool main body defines an interior channel extending between the first and second opposite ends of the insertion tool; and

the interior channel of the tool main body is in fluid communication with the interior passageway of the catheter main body when the catheter and tool main bodies are connected at the separable connection.

41.-43. (Canceled)

44. (Currently amended) An assembly as defined in claim 34, [[~~43,~~]] wherein:

the insertion tool has an exterior surface; and

the inflation tube extends along the exterior surface of the insertion tool when the main body is connected to the insertion tool.

45. (Currently amended) An assembly as defined in claim 34, [[~~43,~~]] wherein:

the insertion tool is removable from within the coiled section of the inflation tool.

46. (Original) An assembly as defined in claim 45, wherein:

the coiled section permits proximal movement of the insertion tool within the coiled section after separation of the catheter and tool main bodies at the separable connection.

47. (Currently amended) An assembly as defined in claim 34, [[~~43,~~]] wherein:

the coiled section maintains a portion of the inflation tube between the coiled section and the proximal end of the catheter main body substantially in alignment with a portion of the insertion tool during movement of the indwelling catheter and the insertion tool has a unit within the urinary tract to the use position.

48. (Currently amended) An assembly as defined in claim 34, [[~~41,~~]] for use with a syringe having a nozzle, further comprising:

a valve assembly connected to the proximal end of the inflation tube, the valve assembly including a receptacle by which to connect the nozzle of the syringe for transferring inflation fluid from the syringe into the inflation passageway for inflating the balloon.

49.-91. (Canceled)